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### ABSTRACT OF THE DISCLOSURE

An image sensor includes a plurality of active pixel sensors arranged in an array. Each active pixel sensor includes a photosensor that generates a sensor signal nominally indicative of an intensity of light incident on the photosensor and a follower-type amplifier that couples the sensor signal to an output of the active pixel sensor to provide a buffered sensor signal. A column line is provided for each column in the array, and each column line is coupled to the output of the active pixel sensors associated with that column. Row select signal generating circuitry is configured to substantially simultaneously select a set of plural particular rows of the array such that each of the active pixel sensors in the selected set of plural particular rows substantially simultaneously provides the buffered sensor signal for that pixel sensor to the column line for the column to which that pixel sensor belongs such that an output node of the column line indicates a collective output signal for the active pixel sensors in the selected set of plural particular rows, belonging to that column. Column select signal generating circuitry configured to substantially simultaneously select a set of plural particular columns of the array such that the output nodes for the selected plural particular columns are substantially simultaneously coupled to an output node of the image sensor.